```
Connecting via Winsock to STN


Welcome to STN International!  Enter x:x

LOGINID:sssptau153cxa

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  May 10   PROUSDDR now available on STN
 NEWS  4  May 19   PROUSDDR: One FREE connect hour, per account, in both May
                   and June 2004
 NEWS  5  May 12   EXTEND option available in structure searching
 NEWS  6  May 12   Polymer links for the POLYLINK command completed in REGISTRY
 NEWS  7  May 17   FRFULL now available on STN
 NEWS  8  May 27   New UPM (Update Code Maximum) field for more efficient patent
                   SDIs in CAplus
 NEWS  9  May 27   CAplus super roles and document types searchable in REGISTRY
 NEWS 10  May 27   Explore APOLLIT with free connect time in June 2004
 NEWS 11  Jun 22   STN Patent Forums to be held July 19-22, 2004

 NEWS EXPRESS  MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 19:32:07 ON 23 JUN 2004

=> file caplus uspatful europatful japio medline biosis embase
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.21       0.21

FILE 'CAPLUS' ENTERED AT 19:32:26 ON 23 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 19:32:26 ON 23 JUN 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
```

```
FILE 'EUROPATFULL' ENTERED AT 19:32:26 ON 23 JUN 2004
COPYRIGHT (c) 2004 WILA Verlag Muenchen (WILA)

FILE 'JAPIO' ENTERED AT 19:32:26 ON 23 JUN 2004
COPYRIGHT (C) 2004 Japanese Patent Office (JPO)- JAPIO

FILE 'MEDLINE' ENTERED AT 19:32:26 ON 23 JUN 2004

FILE 'BIOSIS' ENTERED AT 19:32:26 ON 23 JUN 2004
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 19:32:26 ON 23 JUN 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

=> S (brain or (spinal cord) and (injury or trauma or degenerat? or stroke or
anoxia)
UNMATCHED LEFT PARENTHESIS '(BRAIN'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> S (brain or (spinal cord) and (injury or trauma or degenerat? or stroke or
anoxia))
L1     2237308 (BRAIN OR (SPINAL CORD) AND (INJURY OR TRAUMA OR DEGENERAT? OR
               STROKE OR ANOXIA))

=> S (bone marrow cells) and cultured
   6 FILES SEARCHED...
L2       18688 (BONE MARROW CELLS) AND CULTURED

=> s l1 and l2
L3        2819 L1 AND L2

=> s l3 and (inject? or implant? or transplant?)
L4        2670 L3 AND (INJECT? OR IMPLANT? OR TRANSPLANT?)

=> s l4 and (marrow stromal cells)
L5         210 L4 AND (MARROW STROMAL CELLS)

=> s l5 and neurosphere#
L6           5 L5 AND NEUROSPHERE#

=> s l6 and (new neuron? or (nerve regenerat?)
UNMATCHED LEFT PARENTHESIS 'AND (NEW'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> s l6 and (new neuron? or (nerve regenerat?))
L7           0 L6 AND (NEW NEURON? OR (NERVE REGENERAT?))

=> s l6 and regenerat?
L8           4 L6 AND REGENERAT?

=> d l8 1-4 ibib abs

L8   ANSWER 1 OF 4  USPATFULL on STN
ACCESSION NUMBER:        2003:231620  USPATFULL
TITLE:                   Cultures, products and methods using stem cells
INVENTOR(S):             Weiss, Mark L., Manhattan, KS, UNITED STATES
                         Troyer, Deryl L., Manhattan, KS, UNITED STATES
                         Davis, Duane, Westmoreland, KS, UNITED STATES
                         Mitchell, Kathy E., Manhattan, KS, UNITED STATES
PATENT ASSIGNEE(S):      Kansas State University Research Foundation (U.S.
                         corporation)
```

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003161818	A1	20030828	
APPLICATION INFO.:	US 2002-83779	A1	20020225	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
NUMBER OF CLAIMS: 43
EXEMPLARY CLAIM: 1
LINE COUNT: 1447

AB Stem cells from human sources can have a variety of useful applications in disease treatment and biotechnology. More particularly the umbilical cord matrix stem (UCMS) cell cultures of the invention have a variety of totipotent, pluriotent, or multipotent cells for a variety of end uses from a non-controversial, universally available, species-specific source. The technology can have application to any placental animal, including agricultural and laboratory animals and humans. The invention relates to isolating, culturing the stem cells, maintaining the stem cells, transforming the stem cells into useful cell types using genetic or other transformation technologies, stem cell and tissue banking and using untransformed or transformed cells in disease treatment.

L8 ANSWER 2 OF 4 USPATFULL on STN
ACCESSION NUMBER: 2003:166054 USPATFULL
TITLE: Pluripotent stem cells derived without the use of embryos or fetal tissue
INVENTOR(S): Levanduski, Mike, River Vale, NJ, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003113910	A1	20030619	
APPLICATION INFO.:	US 2001-26420	A1	20011219	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DAVIDSON, DAVIDSON & KAPPEL, LLC, 14th Floor, 485 Seventh Avenue, New York, NY, 10018
NUMBER OF CLAIMS: 76
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 3528
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a method for deriving precursors to pluripotent non-embryonic stem (P-PNES) and pluripotent non-embryonic stem (PNES) cell lines. The present invention involves nuclear transfer of genetic material from a somatic cell into an enucleated, zona pellucida free human ooplastoid having a reduced amount of total cytoplasm. The present invention provides a new source for obtaining human and other animal pluripotent stem cells. The source utilizes as starting materials an oocyte and a somatic cell as the starting materials but does not require the use, creation and/or destruction of embryos or fetal tissue and does not in any way involve creating a cloned being. The oocyte never becomes fertilized and never develops into an embryo. Rather, portions of the oocyte cytoplasm are extracted and combined with the nuclear material of individual mature somatic cells in a manner that precludes embryo formation. Murine, bovine, and human examples of the procedure are demonstrated. Subsequently, the newly constructed P-PNES cells are **cultured** in vitro and give rise to PNES cells and cell colonies. Methods are described for culturing the P-PNES cells to yield purified PNES cells which have the ability to differentiate into cells derived from mesoderm, endoderm, and ectoderm germ layers. Methods are described for maintaining and proliferating PNES cells in culture in an

undifferentiated state. Methods and results are described for analysis and validation of pluripotency of PNES cells including cell morphology, cell surface markers, pluripotent tumor development in SCID mouse, karyotyping, immortality in in vitro culture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 4 USPATFULL on STN
ACCESSION NUMBER: 2002:164392 USPATFULL
TITLE: Tolerizing allografts of pluripotent stem cells
INVENTOR(S): Chiu, Choy-Pik, Cupertino, CA, UNITED STATES
Kay, Robert M., San Francisco, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002086005	A1	20020704
APPLICATION INFO.:	US 2001-990522	A1	20011121 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-252688P	20001122 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GERON CORPORATION, 230 CONSTITUTION DRIVE, MENLO PARK, CA, 94025
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 1045
AB This disclosure provides a system for overcoming HLA mismatch between an allograft derived from stem cells, and a patient being treated for tissue **regeneration**. A state of specific immune tolerance is induced in the patient, by administering a population of tolerizing cells derived from the stem cells. This allows the patient to accept an allograft of differentiated cells derived from the same source. This invention is important because it allows a single line of stem cells to act as a universal donor source for tissue **regeneration** in any patient, regardless of tissue type.

L8 ANSWER 4 OF 4 MEDLINE on STN
ACCESSION NUMBER: 2002046690 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11776476
TITLE: **Brain** from bone: efficient "meta-differentiation" of marrow stroma-derived mature osteoblasts to neurons with Noggin or a demethylating agent.
AUTHOR: Kohyama J; Abe H; Shimazaki T; Koizumi A; Nakashima K; Gojo S; Taga T; Okano H; Hata J; Umezawa A
CORPORATE SOURCE: Department of Pathology, Keio University School of Medicine, Tokyo, Japan.
SOURCE: Differentiation; research in biological diversity, (2001 Oct) 68 (4-5) 235-44.
Journal code: 0401650. ISSN: 0301-4681.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200204
ENTRY DATE: Entered STN: 20020125
Last Updated on STN: 20020419
Entered Medline: 20020418
AB Bone **marrow stromal cells** are able to differentiate into adipogenic, chondrogenic, myogenic, osteogenic, and cardiomyogenic lineages, all of which are limited to a mesoderm-derived origin. In this study, we showed that neurons, which are of an

ectoderm-origin, could be generated from marrow-derived stromal cells by specific inducers, fibronectin/ornithine coating, and **neurosphere** formation. The neurons generated from marrow stroma formed neurites, expressed neuron-specific markers and genes, and started to respond to depolarizing stimuli as functional mature neurons. Among stromal cells, isolated mature osteoblasts which had strong in vivo osteogenic activity could be efficiently converted into functional neurons. This transdifferentiation or meta-differentiation was enhanced by Noggin, an inhibitor of bone morphogenetic proteins, in comparison with 5-azacytidine, a demethylating agent capable of altering the gene expression pattern. Marrow stroma is therefore a potential source of cells for neural cell **transplantation**.

```
=> S (nerve or neural) and (regenerat? or heal? or generat?)
L9      291992 (NERVE OR NEURAL) AND (REGENERAT? OR HEAL? OR GENERAT?)

=> s l9 and ((bone marrow) or (marrow stromal) or neurosphere)
   1 FILES SEARCHED...
L10       8788 L9 AND ((BONE MARROW) OR (MARROW STROMAL) OR NEUROSPHERE)

=> s l10 and (tranplant? or implant? or inject?)
<------User Break------>

SEARCH ENDED BY USER
SEARCH ENDED BY USER

=> s l10 and (transplant? or implant? or inject?)
L11       7799 L10 AND (TRANSPLANT? OR IMPLANT? OR INJECT?)

=> s l11 and (brain or (spinal cord))
L12       6001 L11 AND (BRAIN OR (SPINAL CORD))

=> s l12 and cultured
L13       4832 L12 AND CULTURED

=> s l13 and (new neurons)
L14         70 L13 AND (NEW NEURONS)

=> s l14 and (trauma or injury or stroke)
L15         65 L14 AND (TRAUMA OR INJURY OR STROKE)

=> s l15 and (marrow stromal cells)
L16          2 L15 AND (MARROW STROMAL CELLS)

=> d l16 1-2 ibib abs

L16  ANSWER 1 OF 2  USPATFULL on STN
ACCESSION NUMBER:       2004:152461  USPATFULL
TITLE:                  Methods and materials relating to neurotrimin-like
                        polypeptides and polynucleotides
INVENTOR(S):            Boyle, Bryan J., San Francisco, CA, UNITED STATES
                        Mize, Nancy K., Mountain View, CA, UNITED STATES
                        Arterburn, Matthew C., Los Gatos, CA, UNITED STATES
                        Yeung, George, Mountain View, CA, UNITED STATES
                        Tang, Y. Tom, San Jose, CA, UNITED STATES
                        Zhou, Ping, Cupertino, CA, UNITED STATES
                        Liu, Chenghua, San Jose, CA, UNITED STATES
                        Drmanac, Radoje T., Palo Alto, CA, UNITED STATES
                        Asundi, Vinod, Foster City, CA, UNITED STATES
                        Wang, Menq-Yun, Saratoga, CA, UNITED STATES
                        Chen, Lichuan, Sunnyvale, CA, UNITED STATES
                        Yang, Yea-Huey, Milpitas, CA, UNITED STATES
```

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004116683	A1	20040617	
APPLICATION INFO.:	US 2003-311823	A1	20030929	(10)
	WO 2001-US3651		20010202	

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NUVELO, 675 ALMANOR AVE., SUNNYVALE, CA, 94085
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 5912
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides novel polynucleotides and polypeptides encoded by such polynucleotides and mutants or variants thereof that correspond to a novel human secreted neurotrimin-like polypeptide. These polynucleotides comprise nucleic acid sequences isolated from cDNA library from human thalamus (Hyseq clone identification number 10468562). Other aspects of the invention include vectors containing processes for producing novel human secreted neurotrimin-like polypeptides, and antibodies specific for such polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 2 OF 2 USPATFULL on STN
ACCESSION NUMBER: 2003:51236 USPATFULL
TITLE: Methods for treating a neurological disorder by peripheral administration of a trophic factor
INVENTOR(S): Fallon, James H., Irvine, CA, UNITED STATES
Kinyamu, Richard M., Irvine, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003036193	A1	20030220	
APPLICATION INFO.:	US 2002-167384	A1	20020610	(10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-129028, filed on 4 Aug 1998, PENDING

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1997-55383P	19970804	(60)
	US 2001-328725P	20011011	(60)
	US 2001-297518P	20010611	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO PARK, CA, 94025
NUMBER OF CLAIMS: 32
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 1709
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods of treating a subject having a disease, disorder or condition of the central nervous system. The methods include administering TGF-αpolypeptides, related polypeptides, fragments and mimetics thereof useful in stimulating progenitor cell or stem cell proliferation, migration and differentiation. The methods of the invention are useful to treat and prophylactically ameliorate neurological tissue **injury** in vivo.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 4 MEDLINE on STN

ACCESSION NUMBER: 2002046690 MEDLINE

DOCUMENT NUMBER: PubMed ID: 11776476

TITLE: **Brain** from bone: efficient "meta-differentiation" of marrow stroma-derived mature osteoblasts to neurons with Noggin or a demethylating agent.

AUTHOR: Kohyama J; Abe H; Shimazaki T; Koizumi A; Nakashima K; Gojo S; Taga T; Okano H; Hata J; Umezawa A

CORPORATE SOURCE: Department of Pathology, Keio University School of Medicine, Tokyo, Japan.

SOURCE: Differentiation; research in biological diversity, (2001 Oct) 68 (4-5) 235-44.
Journal code: 0401650. ISSN: 0301-4681.

PUB. COUNTRY: Germany: Germany, Federal Republic of

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200204

ENTRY DATE: Entered STN: 20020125
Last Updated on STN: 20020419
Entered Medline: 20020418

AB Bone **marrow stromal cells** are able to differentiate into adipogenic, chondrogenic, myogenic, osteogenic, and cardiomyogenic lineages, all of which are limited to a mesoderm-derived origin. In this study, we showed that neurons, which are of an ectoderm-origin, could be generated from marrow-derived stromal cells by specific inducers, fibronectin/ornithine coating, and **neurosphere** formation. The neurons generated from marrow stroma formed neurites, expressed neuron-specific markers and genes, and started to respond to depolarizing stimuli as functional mature neurons. Among stromal cells, isolated mature osteoblasts which had strong in vivo osteogenic activity could be efficiently converted into functional neurons. This transdifferentiation or meta-differentiation was enhanced by Noggin, an inhibitor of bone morphogenetic proteins, in comparison with 5-azacytidine, a demethylating agent capable of altering the gene expression pattern. Marrow stroma is therefore a potential source of cells for neural cell **transplantation**.